



1-2 February 2010  
KORANET PARTNERING EVENT

*Research for life-long health*

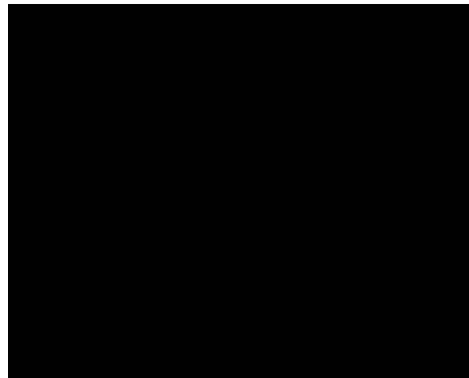
**Béla Demeter MD**  
**Borsod County and Teaching Hospital;**  
**Bay-Nano Nanotechnological Institute**  
*Preclinical research and clinical examination of a new  
silver nanoparticles coated catheters and intraventricular  
cerebral catheter*



## RESEARCH CENTRE

*partnering, partnering, partnering, partnering, partnering*

- **Borsod County  
and Teaching  
Hospital**
  - One of the leader hospital  
in Hungary
  - 1 million outpatients and  
60000 hospitalisation  
patients in a year
  - take part a lot of phase I-IV  
clinical studies and  
international researches





## RESEARCH CENTRE

*partnering, partnering, partnering, partnering, partnering*

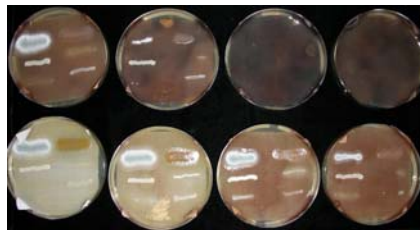
- **Nanotechnological Institute (Bay-Nano)**
  - Preclinical Research Laboratory
    - Cell analyzer lab
    - Microbiological lab
    - Research surgery room
    - Prototyping facility (Clean Room)
  - High resolution metrology (STM, AFM, SEM, TEM)
  - Prototype production of nanosize particle (Ag, Au, Fe)



## PROJECT IDEA

*partnering, partnering, partnering, partnering, partnering*

- **Major project**
  - Using the antibacterial effect of the nano-silver particle in clinical practice
    - To avoid spreading infection
    - Using against antibiotic resistant bacteria
    - Applying nanoparticles on invasive and semi-invasive medical devices (catheters, drain tubes, electrodes)
- **Other projects**
  - Weighbath hydrotherapy study
  - Development of new laser therapy protocols
  - Development in the field cortical brain microelectrodes





## EXPERTISE

*partnering, partnering, partnering, partnering, partnering*

- Borsod County and Teaching Hospital
  - Surgical implants
  - Toxicology, microbiology, hystopathology
  - Clinical pharmacology
  - Clinical trial studies
- Nanotechnological Institute
  - Nanodispersion (including small scale production)
  - High resolution metrology
  - Quality systems
  - High quality research capability (15 PhD researcher)



## PARTNER SOUGHT

*partnering, partnering, partnering, partnering, partnering*

- Research partner for proof of concept, optimizing effect, and trials
- Similar research-activities group
- Marketing
- Possible production facilities
- Angel ventures





## CONTACT DETAILS

*partnering, partnering, partnering, partnering, partnering*

- **Borsod County and Teaching Hospital Hospital**  
H-3501, Miskolc, Szentpeteri kapu 72-76., HUNGARY
  - Bela Demeter MD, consultant neurosurgeon
    - Head of Neurotraumatological Division, Dept. Of Neurosurgery
    - demeter.bela@gmail.com
  - Csaba Olah MD, consultant neurosurgeon-neuroradiologist
    - csolah@gmail.com
- **Nanotechnological Institute**  
H-3515, Miskolc, Egyetemvaros Pf 46, HUNGARY
  - Andras Pungor PhD, Director
    - pungor@bznano.hu
  - Imre Kiricsi DSc, Senior researcher

